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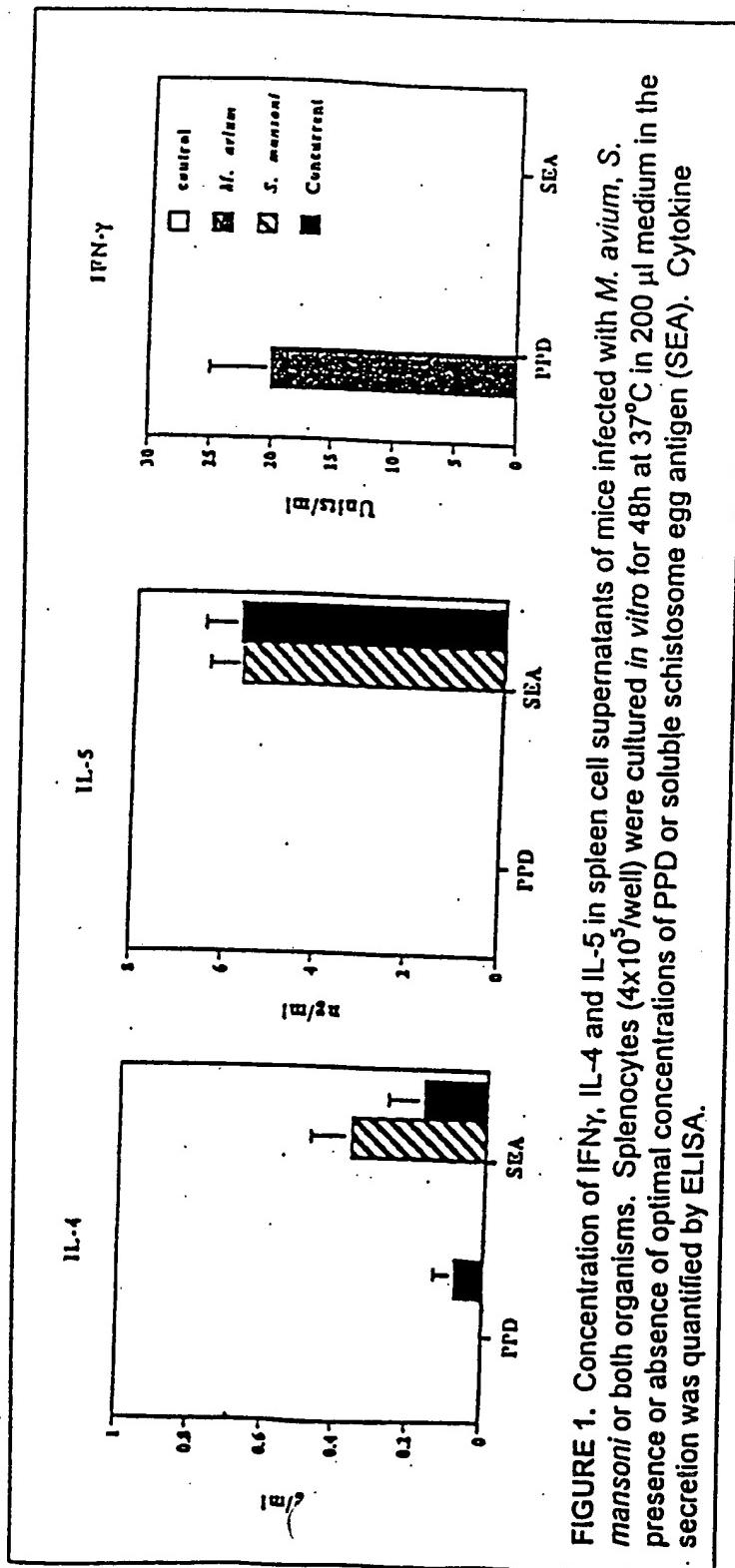
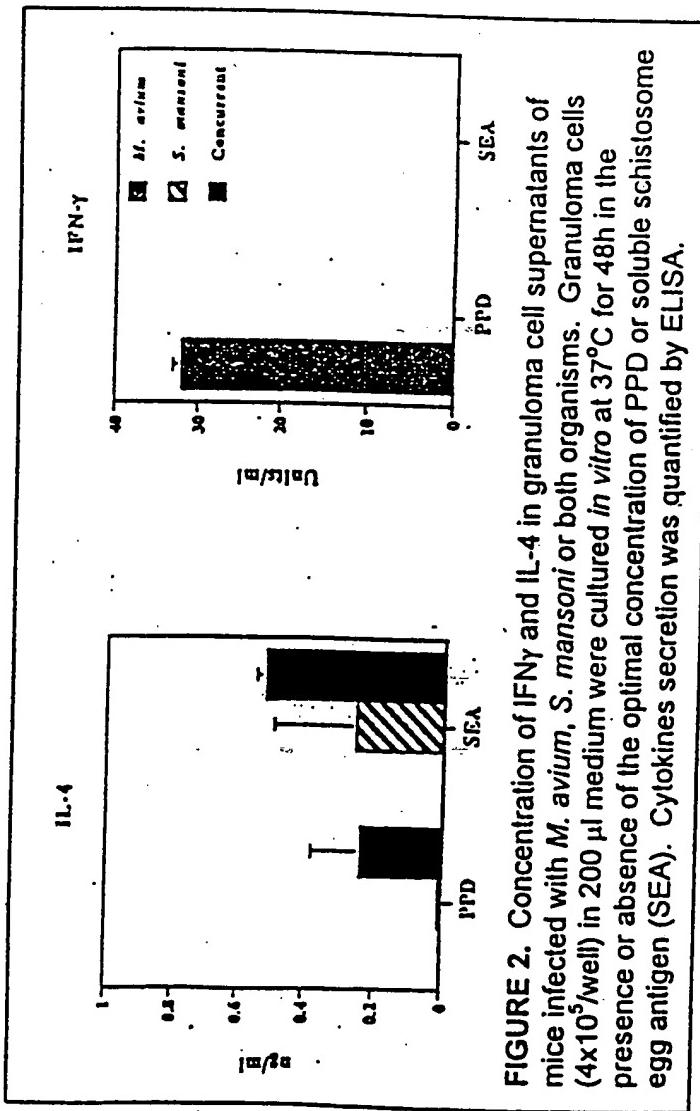


FIGURE 1. Concentration of IFN $\gamma$ , IL-4 and IL-5 in spleen cell supernatants of mice infected with *M. avium*, *S. mansoni* or both organisms. Splenocytes ( $4 \times 10^5$ /well) were cultured *in vitro* for 48h at 37°C in 200  $\mu$ l medium in the presence or absence of optimal concentrations of PPD or soluble schistosome egg antigen (SEA). Cytokine secretion was quantified by ELISA.

Figure 1



**FIGURE 2.** Concentration of IFN $\gamma$  and IL-4 in granuloma cell supernatants of mice infected with *M. avium*, *S. mansoni* or both organisms. Granuloma cells ( $4 \times 10^5$ /well) in 200  $\mu$ l medium were cultured *in vitro* at 37°C for 48h in the presence or absence of the optimal concentration of PPD or soluble schistosome egg antigen (SEA). Cytokines secretion was quantified by ELISA.

Figure 2

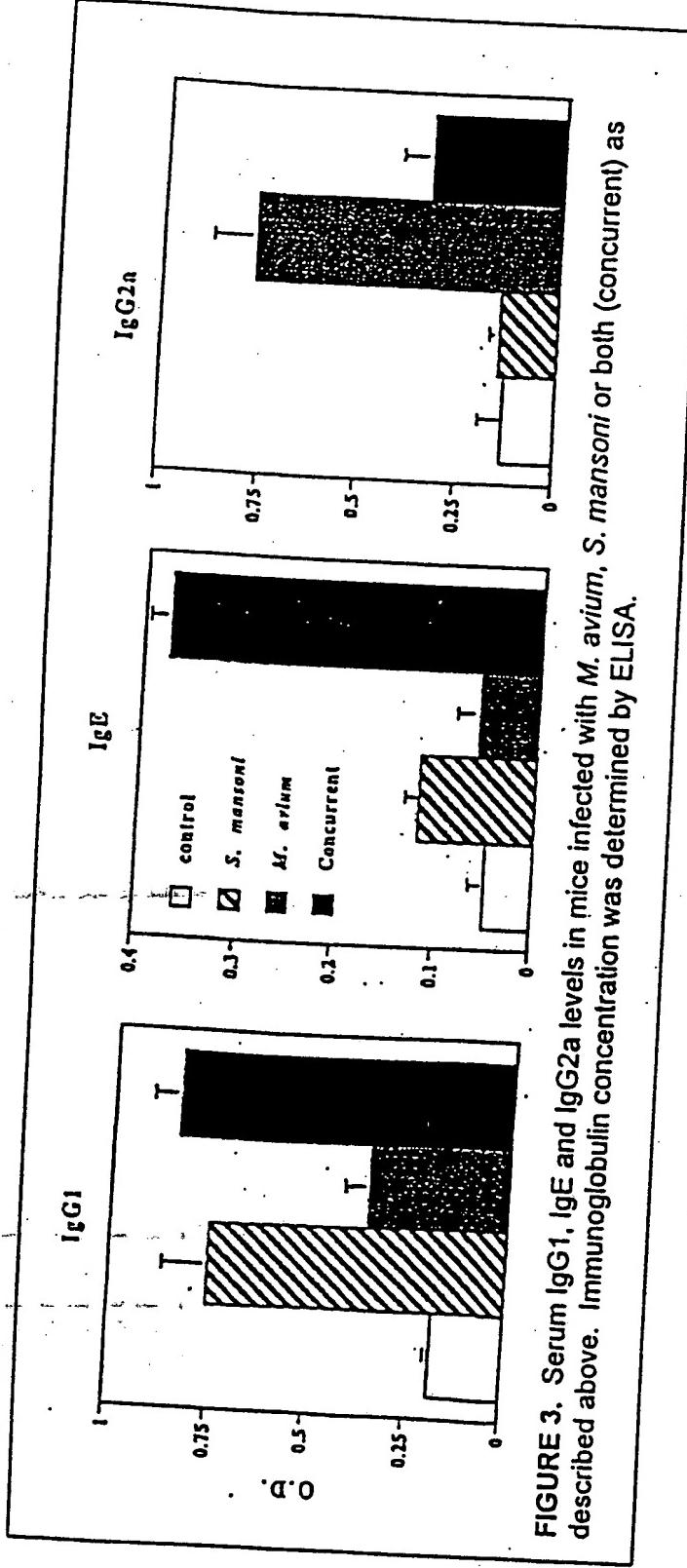
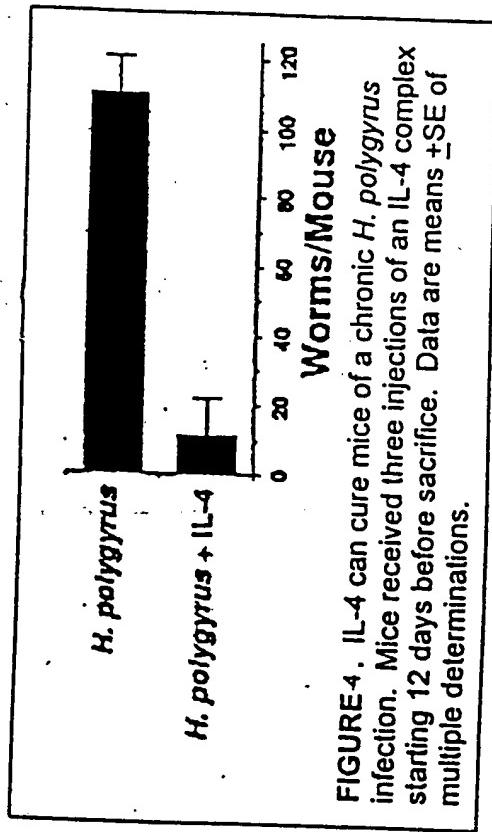


FIGURE 3. Serum IgG1, IgE and IgG2a levels in mice infected with *M. avium*, *S. mansoni* or both (concurrent) as described above. Immunoglobulin concentration was determined by ELISA.

Figure 3



**FIGURE 4.** IL-4 can cure mice of a chronic *H. polygyrus* infection. Mice received three injections of an IL-4 complex starting 12 days before sacrifice. Data are means  $\pm$  SE of multiple determinations.

Figure 4

MICE PREVIOUSLY COLONIZED  
WITH AN INTESTINAL HELMINTH  
DEVELOP ATTENUATED TNBS  
COLITIS

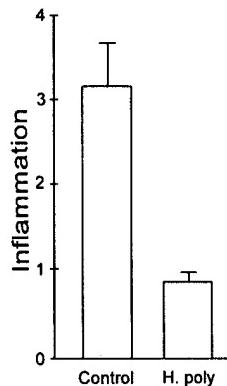
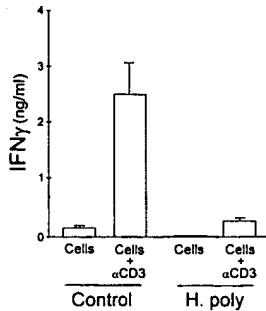


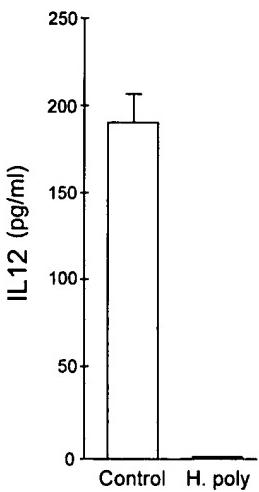
Fig 5

**COLONIZATION WITH *H.*  
*POLYGYRUS* INHIBITS  
MUCOSA  
IFN $\gamma$  RESPONSIVENESS**

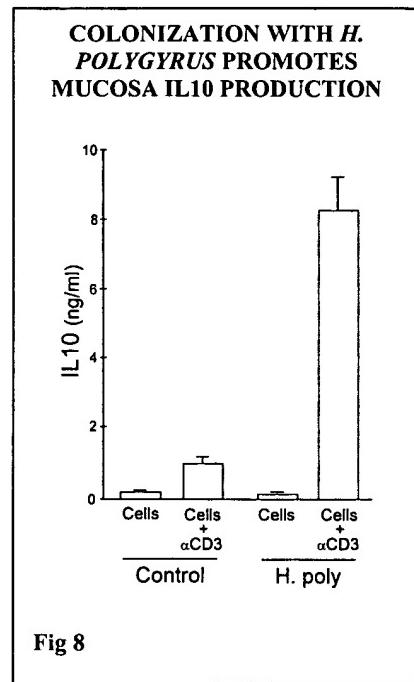


**Fig 6**

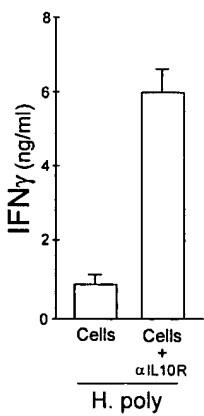
***H. POLYGYRUS BLOCKS  
MUCOSA IL12 SYNTHESIS***



**Fig 7**

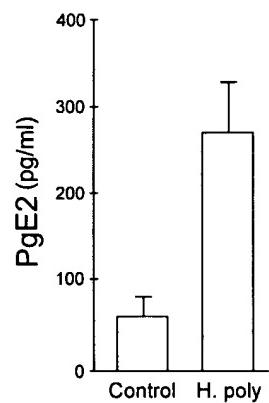


**BLOCKADE OF IL10R  
ENHANCES LPMC IFN $\gamma$   
PRODUCTION**



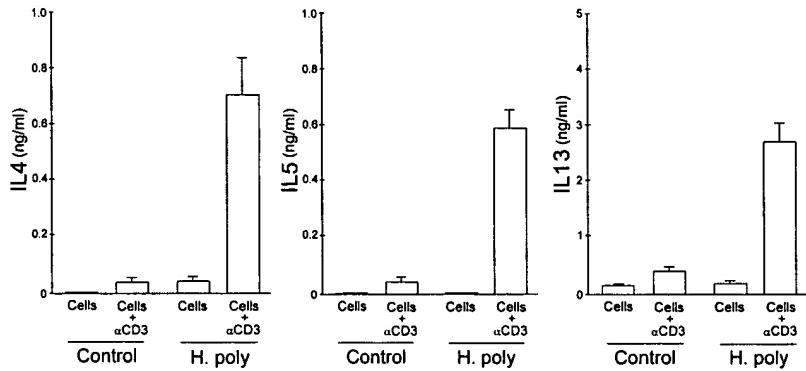
**Fig 9**

**COLONIZATION WITH *H. POLYGYRUS* PROMOTES  
MUCOSA PGE2  
PRODUCTION**



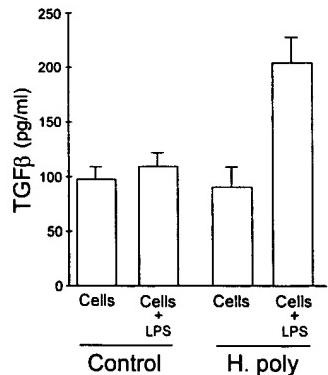
**Fig 10**

**COLONIZATION WITH *H. POLYGYRUS* PROMOTES MUCOSA IL4, IL5 AND IL13 PRODUCTION**



**Fig 11**

**COLONIZATION WITH *H.*  
*POLYGYRUS* PROMOTES  
MUCOSA TGF $\beta$  PRODUCTION**



**Fig 12**

T CELLS MAKE THE IFN $\gamma$  IN  
THE INTESTINAL MUCOSA OF  
HEALTHY WT MICE

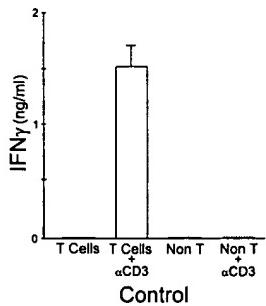


Fig 13

TRANSFER OF MLN CELLS FROM *H*  
*POLYGYRUS*-BEARING MICE INTO  
UNINFECTED WT MICE INHIBITS  
LPMC IFN $\gamma$  RESPONSIVENESS

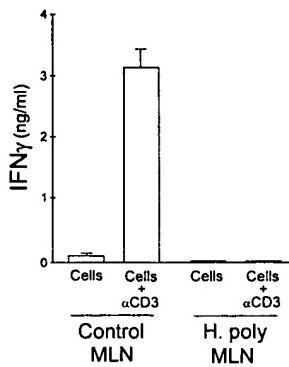
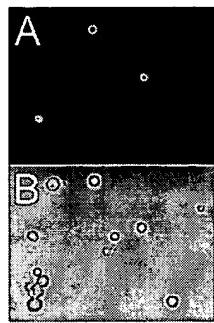
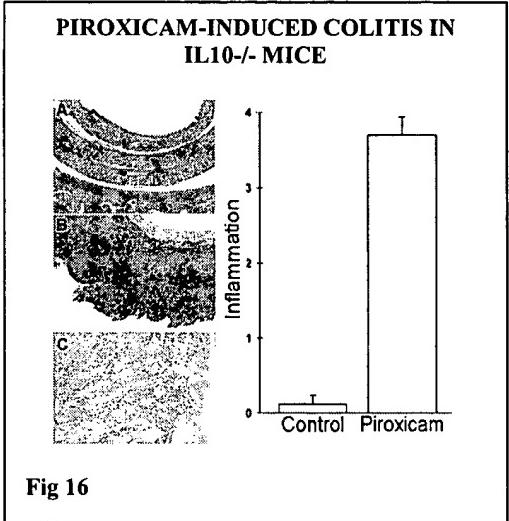


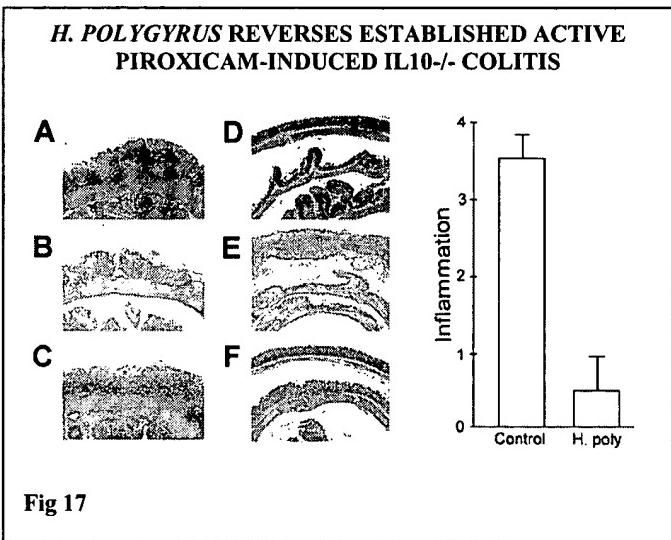
Fig 14

**MLN T CELLS FROM MICE BEARING *H.  
POLYGYRUS* ENTER GUT MUCOSA  
WHEN TRANSFERRED INTO WT  
RECIPIENTS**

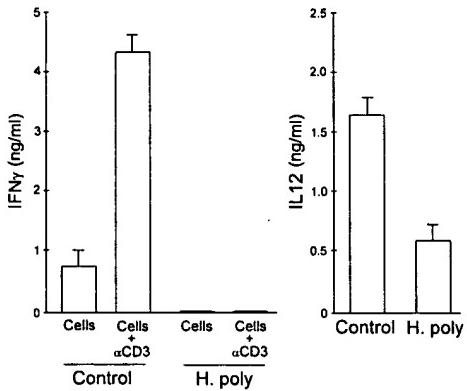


**Fig 15**



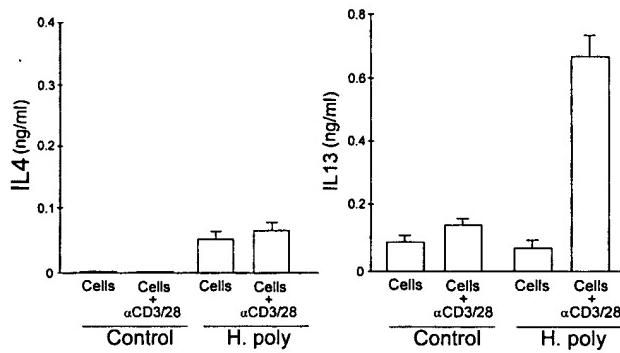


**H. POLYGYRUS BLOCKS LPMC IFN $\gamma$  AND IL12 PRODUCTION IN IL10 $^{-/-}$  COLITIS**



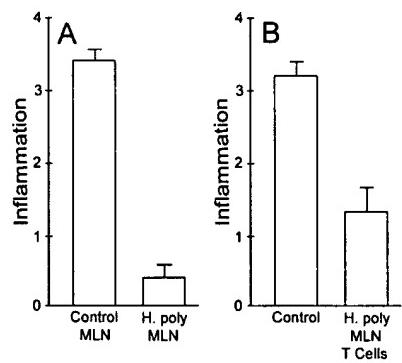
**Fig 18**

***H. POLYGYRUS AUGMENTS LPMC IL4 AND IL13 PRODUCTION IN IL10<sup>-/-</sup> COLITIS***



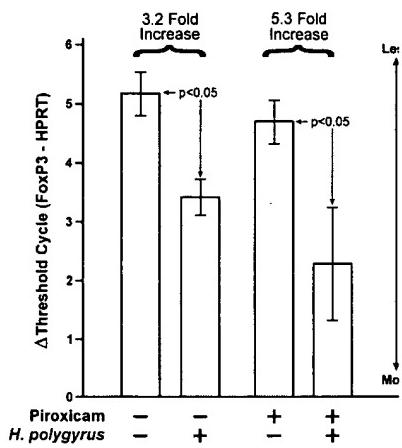
**Fig 19**

**MLN CELLS FROM IL10KO MICE  
COLONIZATION WITH *H.  
POLYGYRUS* INHIBIT ACTIVE  
IL10KO IBD**



**Fig 20**

***H. POLYGYRUS AUGMENTS MLN  
CELL EXPRESSION OF *Foxp3*  
mRNA AS MEASURED WITH  
REAL TIME RT-PCR***



**Fig 21**

***H. POLYGYRUS REDUCES MLN  
CELL EXPRESSION OF Smad7  
mRNA AS MEASURED WITH  
REAL TIME RT-PCR***

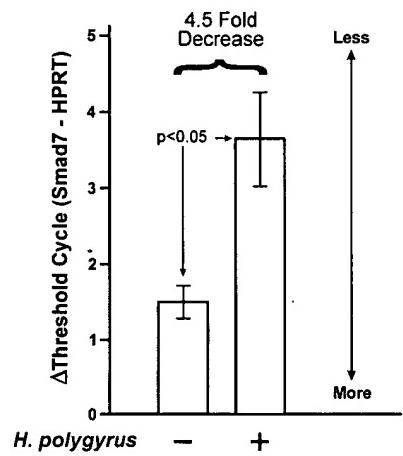


Fig 22

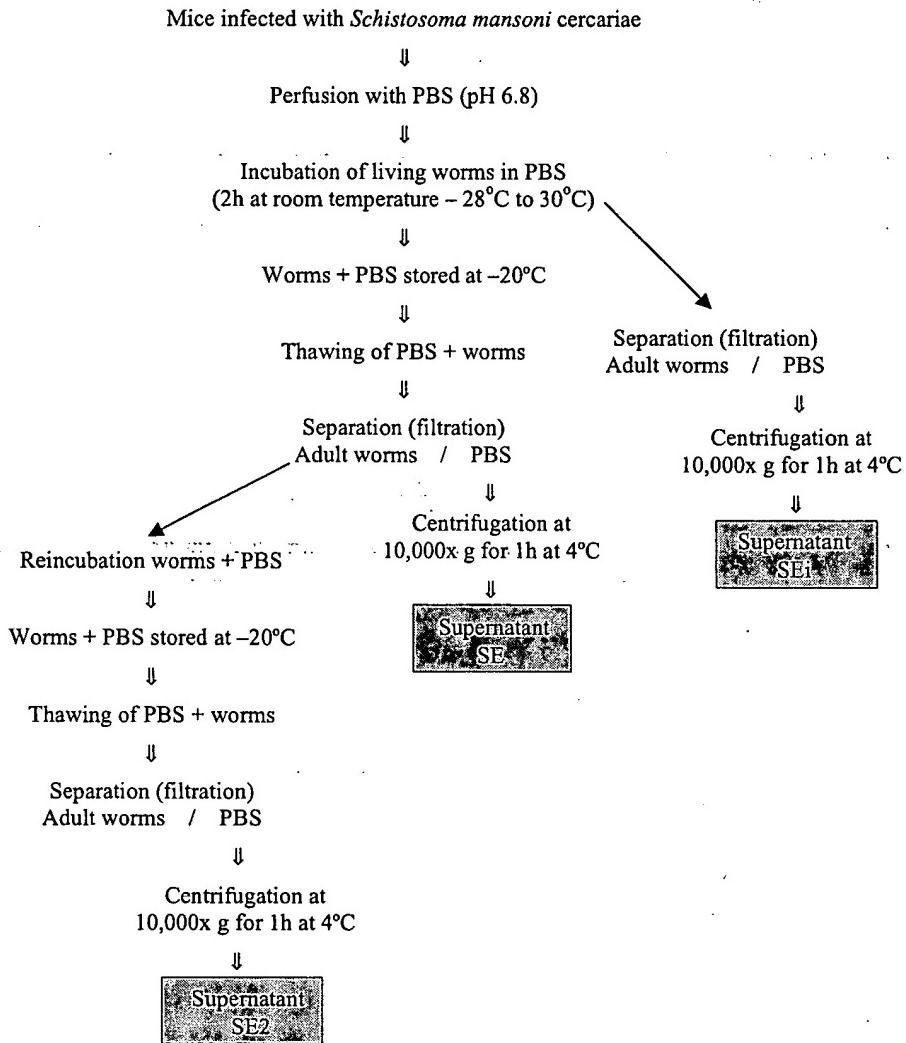


Fig. 11 antigens - diagram of extraction procedures

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